

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0048260 A1**
Matusis (43) **Pub. Date: Mar. 13, 2003**(54) **SYSTEM AND METHOD FOR SELECTING
ACTIONS BASED ON THE IDENTIFICATION
OF USER'S FINGERS**(52) **U.S. Cl. 345/173**(76) **Inventor: Alec Matusis, Stanford, CA (US)**(57) **ABSTRACT**

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(21) **Appl. No.: 10/222,195**(22) **Filed: Aug. 16, 2002****Related U.S. Application Data**(60) **Provisional application No. 60/313,083, filed on Aug.
17, 2001.****Publication Classification**(51) **Int. Cl.⁷ G09G 5/00**

Provided is a system and method that increases the functionality of input devices and control panels. A dependent relationship between n functions and n fingertips is associated with an input sensor. Including different motions for each fingertip could extend this dependent relationship and further increase functionality. A user selects only one of his/her fingertips, which then activates the input sensor (through on/off activation and/or motion). The selected fingertip is the only fingertip that is required to activate the input sensor, thereby allowing the input sensor to be arbitrary small. An imaging means is included to identify which fingertip activates the input sensor. Imaging means requires the acquisition of at least one image of a part of the user's hand large enough to identify the selected fingertip activating the input sensor. A processing means is included to determine from data of the input sensor and acquired images which function is selected.

